Listing of the claims:

1. (Currently Amended) A control device for non-positive connections, in particular screw connections, wherein the device possesses force-application elements and at least one measuring element, wherein the measuring element is provided at least in some areas with a layer exhibiting a force sensory effect, characterized in that the force sensory layer changes its electrical resistance due to changes of an applied force and the surface of the layer has as support profiles flat prominences constructed for recording ~~force for recording~~ a force applied by the force application elements.

2. (Cancelled).

3. (Previously Presented) The control device according to claim 1, characterized in that the force sensory layer comprising diamond-like carbon-based layers including at least one of an amorphous and nanocrystalline structure.

4. (Previously Presented) The control device according to claim 1, characterized in that the force-application elements comprise the head of a set screw and the nut complementary thereto on the set screw.

5. (Previously Presented) The control device according to claim 1, characterized in that the measuring element possesses upper and lower sides located opposite one another, wherein at least one of the upper and lower side are each provided at least in part with a respective force sensory layer.

6. (Previously Presented) The control device according to claim 1, characterized in that in the areas not covered by the force sensory layer, the measuring element is provided with an electrically insulating layer or is uncoated in these areas.

7. (Previously Presented) The control device according to claim 1, characterized in that the measuring element has the shape of a disk with a central hole.

8. (Previously Presented) The control device according to claim 1, characterized in that the prominences are arranged in annular manner on the surface of the measuring element.

9. (Previously Presented) The control device according to claim 8, characterized in that a plurality of annular prominences is provided which are arranged concentrically relative to one another.

10. (Previously Presented) The control device according to claim 8, characterized in that the prominences have a rectangular, triangular or rounded shape perpendicular to the circumferential direction of the annular prominence.

11. (Previously Presented) The control device according to claim 1, characterized in that a plurality of prominence areas is provided, wherein each of these have a different type and/or number of prominences.

12. (Previously Presented) The control device according to claim 11, characterized in that the prominence areas are separated electrically from one another.

13. (Previously Presented) The control device according to claim 1, characterized in that the measuring element is accommodated in a sleeve to prevent changes in the position of the measuring element in the event of a movement of the force-application elements relative to one another.

14. (Previously Presented) The control device according to claim 1,

characterized in that the measuring element has a core onto which the force sensory layer is applied.

15. (Previously Presented) The control device according to claim 1, characterized in that the core is composed of hardened or unhardened steel, alloyed steels or stainless steel, of ceramic materials or glass-fiber reinforced plastics.

16. (Previously Presented) The control device according to claim 1, characterized in that the force sensory layer is composed of amorphous carbon.

17. (Previously Presented) The control device according to claim 1, characterized in that this contains electric connections and an electric circuit for obtaining, transmitting and evaluating signals.

18. (Previously Presented) The control device according to claim 17, characterized in that signal transmission ensues by telemetry.